DUAL OPERATIONAL AMPLIFIER—YD4558

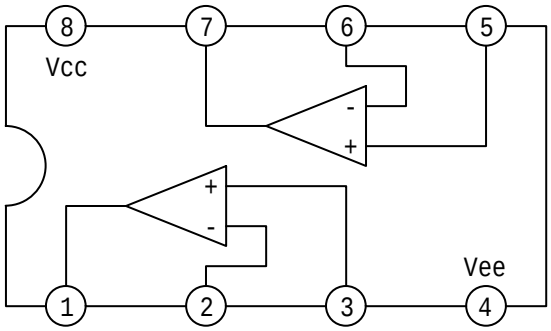
DESCRIPTION

The YD4558 is a monolithic integrated circuit designed for dual operational amplifier.

FEATURES

*NO frequency compensation required
*NO latch-up
*Large common mode and differential voltage range
*Parameter tracking cover temperature range
*Gain and phase match between amplifiers
*Internally frequency compensated
*Low noise input transistors (Vin=2.5μV)

BLOCK DIAGRAM



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ABSOLUTE MAXIMUM RATINGS (Tamb=25℃)

PARAMETER		SYMBOL	VALUE	UNIT
Supply Voltage		Vcc	±18	V
Differential Input Voltage		$V_{I(DIFF)}$	±30	V
Power Dissipation	DIP8	P_D	500	mW
	SOP8		250	
D terminal Output Voltage		V_I	±15	V
Operating Temperature		Topr	-20～+75	℃
Storage Temperature		Tstg	-40～+125	℃

ELECTRICAL CHARACTERISTICS

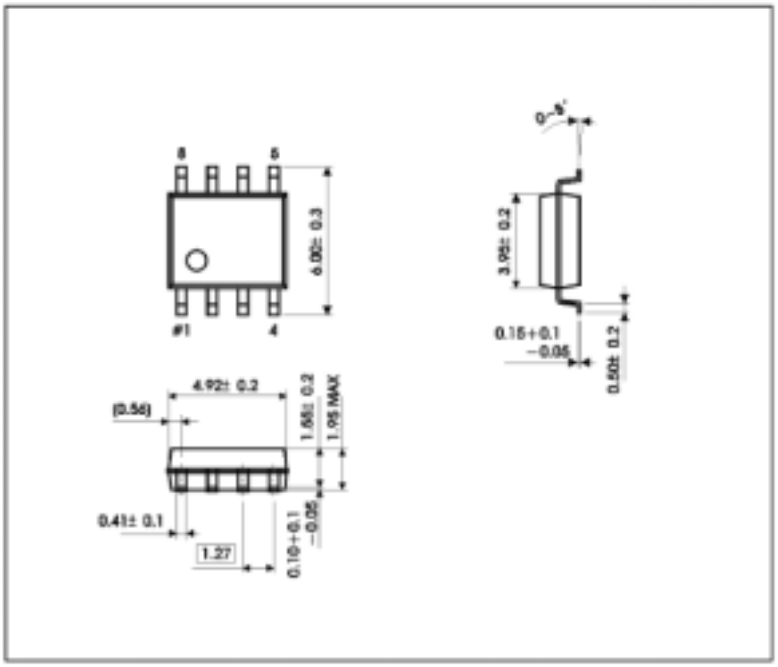
(Vcc=15V, Vee=-15V, Tamb=25℃, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Supply Current	I_{CC}			4.0	6.0	mA
Input Offset Voltage	V_{IO}	R_S＜10kΩ		0.5	6	mV
Input Offset Current	I_{IO}			5	200	nA
Input Bias Current	I_{BIAS}			25	500	nA
Large Signal Voltage Gain	Avo	Vo(p-p)=10V, R_L＜2kΩ	86	100		dB
Common Mode Input Voltage Range	V_{ICM}		±12	±14		V
Common Mode Rejection Ratio	K_{CMR}	R_S＜10kΩ	70	90		dB
Supply Voltage Rejection Ratio	K_{SVR}	R_S＜10kΩ	76.5	90		dB
Output Voltage Swing	Vo(p-p)	R_S＞10kΩ		±12	±14	V
Slew Rate	SR	Vi=20mV, R_L＞2kΩ, C_L＜100p		1.0		V/μs
Rise Time	T_{RIS}	Vi=20mV, R_L＞2kΩ, C_L＜100p		0.3		μs
Overshoot	OS	Vi=20mV, R_L＞2kΩ, C_L＜100p		15		%

OUTLINE DRAWING

SOP-8

unit:mm



DIP-8

unit:mm